



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

ORIGINAL



SDMS DocID

2232343

March 7, 2006

Mr. George M. Kickel
Manager, Environment, Safety & Health
Lord Corporation
2000 West Grandview Blvd.
P.O. Box 10038
Erie, PA 16514-0038

**RE: Lord-Shope Landfill Superfund Site
In-Situ Vapor Stripping System**

Dear Mr. Kickel:

By way of a letter dated February 28, 2006 from ARCADIS G&M, Inc., EPA received Lord Corporation's responses to concerns that EPA expressed in an October 25, 2005 letter relating to the in-situ vapor stripping system and Lord's request that EPA consider a change from the current thermal oxidizer to activated carbon sorption. The responses in Lord's February 28, 2006 letter require further clarification.

In the first paragraph of Lord's response number 1, it is stated that, "*The total VOC concentration has decreased from 13,316 pounds per year (lb/yr) in 1997 to 2,896 lb/yr in 2004, indicating that the VOC loading on the off-gas treatment system is considerably less now...*" In May, 2005, Lord switched from analyzing the ISVS samples in-house using Method TO-14 to Method TO-15 using an independent laboratory. Due to the better accounting of VOCs using Method TO-15, EPA expects the data to show that more VOCs were emitted from the landfill in 2005 than in 2004. EPA requests that Lord Corporation submit to EPA, to the extent practicable, the amount of VOCs that were emitted in 2005 from the Lord-Shope Landfill so that we can more accurately assess the current conditions.

In Lord's response number 2, vinyl chloride emissions were addressed. Here again, 2004 data was used to evaluate the amount of vinyl chloride emitted from the landfill. Because of the amount of dilution necessary to analyze the influent samples, some of the vinyl chloride concentrations (e.g., May and June 2005) are listed as "non-detectable." For any non-detectable concentration, one-half of the Limit of Quantitation should be listed as the concentration of vinyl chloride in the respective samples for this analysis. For May 2005, the Limit of Quantitation for vinyl chloride was $5,100 \mu\text{g}/\text{m}^3$, so $2,550 \mu\text{g}/\text{m}^3$ should be used in the analysis. Likewise, for June 2005, the Limit of Quantitation for vinyl chloride was 1000 ppbv, therefore, 500 ppbv should



Page 2 of 2

be used in the analysis. EPA requests that Lord Corporation base its calculations on 2005 vinyl chloride data, to the extent practicable.

Air modeling was performed using the ISCST3 model to determine whether unmitigated amounts of vinyl chloride from the ISVS system would produce unacceptable ambient air concentrations. EPA considers air modeling to be a valid approach, however, the modeling should be re-performed using 2005 values for vinyl chloride. EPA requests that Lord Corporation submit all source input parameters plus meteorological, terrain, input and output files associated with the modeling exercise. EPA also requests that Lord Corporation submit a map showing the predicted annual average ambient air concentrations of vinyl chloride.

The requested information is intended to aid EPA in deciding if it is advisable for Lord Corporation to pursue a formal design of an activated carbon sorption system.

If you would like to discuss this letter, please contact me at 215-814-3217.

Sincerely,

A handwritten signature in black ink that reads "Victor J. Janosik". The signature is written in a cursive style with a large, stylized "V" at the beginning.

Victor J. Janosik
Remedial Project Manager

CC: (b) (4) [REDACTED] ARCADIS G&M, Inc.
John Morettini, PADEP
Aleacia Chinkhota, Esq., EPA
Patricia Flores-Brown, EPA